

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON

DESCRIPTION OF A NEW DEER (*DORCELAPHUS TEXANUS*) FROM TEXAS AND NORTHERN MEXICO.

BY EDGAR A. MEARNS.

The small white-tailed deer of Texas differs so materially in size, proportions, coloration, and cranial characters from the other members of the *Dorcelaphus americanus** group as to necessitate its separation. It may be known by the following description:

Dorcelaphus texanus new species. Texan Deer.

Type from Fort Clark, Kinney County, Texas. No. 4288, author's collection.† Adult male. Collected December 25, 1897, by Dr. Edgar A. Mearns.

General characters.—Size small; ears relatively small, with black on edges and tip; horns small and strongly incurved; limbs relatively short; molar and premolar teeth very large; general color pale; coat fine and long.

* In the Proceedings of the Biological Society of Washington, vol. X, February, 1896, page 25, Mr. Outram Bangs reverted to the specific name *americanus* with the following remark: "The name *Cervus virginianus* Boddaert is so well known and has stood for our eastern deer so long that it seems like sacrilege to change it, but it is antedated by seven years by Erxleben's name *Cervus dama americana*. Erxleben proposed this name on page 312 of his *Syst. Regni Animalis, Mammalia*, 1777. In a separate paragraph at the end of his article on *Cervus dama* he asks if *americanus* is different, as supposed by Pennant (*Differtne vere americanus vti Pennanto videtur?*). He quotes a part of Pennant's description and gives synonymy, so that the name will have to stand. He gives its distribution as Virginia and Carolina."

† The type and other specimens collected will be placed, as soon as possible, in the collection of the U. S. National Museum, at Washington, D. C.

Color.—In the type, which is in complete winter coat, the upper surface is superficially a pepper-and-salt mixture of black, yellowish white, and gray. A distinctly blackish area begins anteriorly on the crown, between the horns and ears, and extends posteriorly almost to the root of the tail. The color gradually pales to light yellowish ash on the sides. All of the hairs of the upper surface are white at extreme base, plumbeous-ash in the middle, black apically, and subterminally ringed with yellowish white, these whitish annuli increasing in width from the vertebral area downwards. Under surface pure white on the axillæ, inner surface of thighs, and abdomen; fuliginous on the chest. Tail white below, black above, the black of the upper surface much obscured by broad yellowish brown subterminal annuli to the hairs. Head, with naked nose-pad, and front of under lip, plumbeous-black. Iris yellowish hazel. Upper jaw white anteriorly, next to the naked muffle, becoming light ash further back, with an intervening area of black, which latter forms a triangular area, with its base applied to the posterior margin of the nostril and its apex crossing the middle of the upper lip and extending over the under jaw to form a small black spot behind the pure white chin. Throat white, mixed with ash where the basal coloring of the hair is exposed, between the white tips. Upper side of head black, much obscured on the forehead by dirty white and reddish subterminal annuli. Orbits and base of ear externally whitish. Concavity of ear densely clothed with long white hair; convexity tipped and bordered by black, except at base anteriorly, the black enclosing an area of pepper-and-salt gray; base of ear posteriorly clear ash-gray. Sides of head ash-gray, thickly annulated with whitish. Brows and bristles about eyes all black; those about muzzle black and white. Limbs reddish fawn, more or less mixed with gray and black anteriorly, whitish or pale fawn color posteriorly, and white around hoofs and between toes. Hoofs plumbeous, horn color where worn off at apex. The metatarsal gland, which measures 15 mm. in length, is surrounded by a tuft of reversed hair, which is white in the middle, bordered by dark brown.

A young male, an old female, and a young female (Nos. 4289, 4290, and 4291, author's collection) killed with the type December 25, 1897, and also in full winter pelage, agree essentially in coloration with the adult male described above, except that the ears and crown of head are blacker, and the light annulations on the upper side of the tail nearly or quite wanting, leaving that part clear black.

The summer coat, as usual, is reddish.

Horns.—The horns of the type approach those of the Sonoran deer, *Dorcetaphus couesi* (Coues and Yarrow), in size and form. There are two basal snags, one directed upward and backward (length 75 mm.), and one forward (length 37 mm.), with four additional points to each horn, making twelve points in all. The length of the beam, measured to end of anterior point, following the curves of the horn, is 440 mm. The horns are symmetrical, their longest points measuring 175 mm. in height. The beam is strongly curved upward, forward, and inward, the tips of the anterior tines

approaching within 70 mm. of each other. The total expanse of the horns is 330 mm.; the circumference of beam, at base, 80 mm.

Measurements of type.—Length, measured from end of muzzle to end of last caudal vertebra, 1585 mm.; tail vertebrae, 265 (to end of hairs 345); ear from crown, 160; ear from base of opening, 140; girth of chest, 800; from tip of nose to angle of mouth, 90; to eye, 152; to center of pupil, 170; to base of ear, 225; to base of horn, 220; to occiput, 280; diameter of eye, 26; fore limb, from coracoid process of scapula to end of hoof, 700; from olecranon, 575; length of manus, 325; hind limb, from knee-joint to end of hoof, 625; length of pes, 430; height of animal at shoulder, 880; height at hips, 900; from great trochanter to coracoid, 710.

Cranial and dental characters.—The skull is narrow, with elongate nasals. That of the type, an old male in which the permanent premolars are considerably worn, presents the following measurements: basilar length (basion to front of premaxillary), 244 mm.; zygomatic breadth (across middle of orbits), 114; occipito-nasal length, 208; least interorbital breadth, 71; greatest length of nasals, 81; greatest breadth of nasals, 31; least breadth of nasals, 18.5; greatest diameter of orbit, 38; length of upper lateral tooth-row, 24. The skull of an old female (No. 4290, author's collection) presents these dimensions: basilar length, 241 mm.; zygomatic breadth, 96; greatest length of nasals, 81; greatest breadth of nasals, 26; greatest diameter of orbit, 35. In the type specimen the nasal and premaxillary bones are separated by a space of 10 mm., which is occupied by a forward arm of the maxillary. In a young male (No. 4289, author's collection), having three points and a basal snag to each horn, the nasal and premaxillary bones barely meet. In an old female (No. 4290, author's collection) and a yearling female (No. 4291, author's collection), the premaxillaries articulate broadly with the nasals.

Remarks.—Numerous skins of this deer from Texas, and Mexico south to San Luis Potosi, have been examined and found to agree in size and coloration with those above described. The horns vary within ordinary limits; but those of the type represent the usual size and form, except that there is more often but one basal snag. The bucks weigh in the neighborhood of 100 pounds, and the does about 75 pounds.

While the Texan deer differs sufficiently from the white-tailed deer of southern Mexico and Central America, as well as from the forms recognized in the United States, to warrant its separation, the available material is insufficient to furnish a reliable indication as to its intergradation with them. Therefore, for the present, it is proper to regard it as a species.

Comparisons.—The type locality of *Dorcelaphus americanus* (Erxleben) was given as Virginia and Carolina. Compared with specimens from that general region, *D. texanus* is found to differ in being much smaller and paler, with actually as well as relatively heavier dentition. Between the ranges of these two, a very different form is interposed in the lowlands of Louisiana.

The Floridan deer, *Dorcelaphus osceola* (Bangs) is even darker in color than *D. americanus*. Compared with the present form, it is larger, with

relatively longer limbs, larger horns, smaller teeth, and more elongate rostrum.

Dorcelaphus macrourus (Rafinesque) is a large pallid form of the northern plains region, characterized by restriction of the dark, and corresponding expansion of the light areas. It has widely branching, often scraggy horns, very different from those of *D. texanus*.

The only remaining deer of the United States requiring comparison with the small Texan species is the Sonoran deer, *Dorcelaphus couesi* (Coues and Yarrow), a still smaller and more pallid animal, having much larger ears, on which the black edging and tips were wanting. The dentition of *D. texanus* is much heavier, and the tail considerably shorter, than in *D. couesi*.

The only Mexican deer with which the present form requires comparison is the animal that has been known by the specific name *mexicanus*. This name was first applied by Gmelin.* According to Dr J. A. Allen,† “the *Cervus mexicanus* of Gmelin, however, is a vague composite species, only in part referable to Deer from Mexico, and in all probability has no relation to the little Sonoran Deer described by Baird.”‡ The name *mexicanus* may, however, be regarded as fixed to a deer of southern Mexico, very different from the Texan deer, by Lichtenstein, who described and figured the species § from specimens sent alive to Berlin, in 1825, by Herr Graf, from ‘Mexico,’ without indication of the exact locality at which they were taken.

*Syst. Nat., I, 1788, p. 179.

† Bull. Am. Mus. Nat. Hist., VII, June 29, 1895, p. 200.

‡ Rept. Pacific R. R. Expl. and Surveys, VIII, Mammals, 1857, pp. 653-655, pl. XXIV, fig. 2.

§ Darstellung, 1827-'34, pl. XVIII.